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OM protein - protein search, using sw model

Run on: May 7, 2002, 12:00:48 ; Search time 53.91 Seconds
(without alignments)
195.111 Million cell updates/sec

Title: US-09-772-103-10

Perfect score: 742

Sequence: 1 MAVLVFLVAFPCVLSQ.....MKRGYANDYWGQGLTVTVSS 142

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 522463 seqs, 74073290 residues

al number of hits satisfying chosen parameters: 522463

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A.Geneseq_1101.*

1:	/SIDS8/gcgdata/geneseq/geneseq/AA1980.DAT.*
2:	/SIDS8/gcgdata/geneseq/geneseq/AA1981.DAT.*
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11:	/SIDS8/gcgdata/geneseq/geneseq/AA1990.DAT.*
12:	/SIDS8/gcgdata/geneseq/geneseq/AA1991.DAT.*
13:	/SIDS8/gcgdata/geneseq/geneseq/AA1992.DAT.*
14:	/SIDS8/gcgdata/geneseq/geneseq/AA1993.DAT.*
15:	/SIDS8/gcgdata/geneseq/geneseq/AA1994.DAT.*
16:	/SIDS8/gcgdata/geneseq/geneseq/AA1995.DAT.*
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18:	/SIDS8/gcgdata/geneseq/geneseq/AA1997.DAT.*
19:	/SIDS8/gcgdata/geneseq/geneseq/AA1998.DAT.*
20:	/SIDS8/gcgdata/geneseq/geneseq/AA1999.DAT.*
21:	/SIDS8/gcgdata/geneseq/geneseq/AA2000.DAT.*
22:	/SIDS8/gcgdata/geneseq/geneseq/AA2001.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	742	100.0	142	22	AAAG66523
2	664	89.5	142	22	AAAG66520
3	603.5	81.3	137	18	AAW30273
4	545	73.5	140	18	AAW22538
5	541.5	73.0	137	22	AAW81975
6	530	71.4	151	17	AAW89841
7	529.5	71.4	135	8	AAW70991
8	527.5	71.1	137	18	AAW30277
9	527	71.0	138	17	AAW01146
10	525	70.8	119	17	AAW98492
11	525	70.8	138	22	AAW69656

ALIGNMENTS

RESULT 1

AAAG66523

ID AAAG66523 standard; Protein; 142 AA.

XX AC AAAG66523;

XX DT 22-OCT-2001 (first entry)

XX DE Humanised anti-CTLA4 heavy chain.

XX DE Human; CTLA4; cytotoxic T lymphocyte associated antigen 4; anti-CTLA4;

XX DE Immunosuppressive; immunomodulator; antiallergic; vaccine; antibody;

XX DE T cell; humanised antibody; autoimmune disorder; graft rejection;

XX DE allergy; heavy chain.

XX OS Homo sapiens.

XX OS Mus musculus.

XX OS Synthetic.

XX PN WO200154732-A1.

XX PD 02-AUG-2001.

XX PF 26-JAN-2001; 2001WO-US02653.

XX PR 27-JAN-2000; 2000US-0178473.

XX PA (GENY) GENETICS INST INC.

XX PI Carreno BM, Wood C, Turner K, Collins M, Gray GS, Morris D;

XX PI O'Hara D, Hinton P, Tsurushita N;

XX DR WPI; 2001-483195/52.

XX DR N-PSDB; AAH76441, AAH76443.

NEW humanised hea
Heavy chain variab
Humanised ID10 ant
Humanised ID10 ant
Heavy chain variab
IL-2 chimeric anti
Anti-IL2R-alpha an
MAB 1A7 heavy chai
Heavy chain variab
Monoclonal antibod
Vh-(Lk)-Vl of anti
Anti-idiotypic mono
TM27 antibody VH c
Humanised anti-CD3
Ganglioside GD2 sp
TM27 antibody VH c
Ganglioside GD2 sp
TM27 antibody VH c
TM27 antibody VH c
Wild type murine a
TM27 antibody VH c
Variable heavy cha
KM-603 heavy chain
Antibody heavy cha
Humanised murine a
Humanised murine a
Anti-DNA antibody
Humanised murine a
Murine VH group 2
HuVhlys. Syntheti
Mouse anti-human I
Human anti-placent
Humanised murine a

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Carreno BM, Wood C, Turner K, Collins M, Gray GS, Morris D;
O'Hara D, Hinton P, Tsurushita N;

XX Novel antibody-toxic group conjugate comprising an antibody that
PT recognizes a molecule expressed only on activated T cells, useful for
PT modulating immune response for treating autoimmune disorder, allergic
PT response -

XX Claim 15; Fig 10; 123pp; English.

XX The invention relates to an antibody-toxic group conjugate comprising
XX an antibody that specifically recognises a molecule expressed only on
XX activated T cells, and a toxic group. The T cell molecule is
XX preferably human cytotoxic T lymphocyte associated antigen 4 (CTLA4).
XX The antibody of the invention is a humanised anti-CTLA4 antibody
XX comprising a sequence of 128 or 142 amino acids fully defined in the
XX specification. The antibody-toxic group conjugate is useful for
XX modulating the immune response in a subject suffering from a disorder,
XX or condition such as autoimmune disorder, immune response to a graft,
XX allergic response or an immune response to a therapeutic protein.
XX The antibody is also useful for research purposes, e.g., in staining
XX and isolating CTLA4-bearing cells. The antibody is also useful for
XX T-cell typing, for isolating specific IL-2 receptor-bearing cells or
XX fragments of the receptor, for vaccine preparation, and for determining
XX the effectiveness of an agent to down-regulate CTLA4 activity. The
XX present sequence is the heavy chain of humanised anti-CTLA4
XX antibody.

XX Sequence 142 AA;

Query Match 100.0%; Score 742; DB 22; Length 142;
Best Local Similarity 100.0%; Pred. No. 4.3e-60;
Matches 142; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MAVLVFLCLVAFPPSCVLSQVQLQESGPGLVKPSQTLSTCTVSGFSLTSYGVYWRQPP 60
Db 1 MAVLVFLCLVAFPPSCVLSQVQLQESGPGLVKPSQTLSTCTVSGFSLTSYGVYWRQPP 60
Qy 61 GKLEWLGVIWAGGTTNYSALMSRLTISKDTSKNOVSLKLSVTAADTAVYVCARGPPH 120
Db 61 GKLEWLGVIWAGGTTNYSALMSRLTISKDTSKNOVSLKLSVTAADTAVYVCARGPPH 120
Qy 121 AMMKRGVAMYDYGQGLTVTVSS 142
Db 121 AMMKRGVAMYDYGQGLTVTVSS 142

RESULT 2
AAG66520
AAG66520 standard; Protein; 142 AA.

AC AAG66520;
XX 22-OCT-2001 (first entry)
XX Mouse antibody 26 heavy chain variable region.
XX Mouse: CTLA4; cytotoxic T lymphocyte associated antigen 4; anti-CTLA4;
XX immunosuppressive; immunomodulator; antiallergic; vaccine; antibody;
XX T cell; humanised antibody; autoimmune disorder; graft rejection;
XX allergy; antibody 26; heavy chain variable region; VH.
XX Mus musculus.
XX WO200154732-A1.
XX 02-AUG-2001.
XX 26-JAN-2001; 2001WO-US02653.
XX 27-JAN-2000; 2000US-0178473.
XX (GEMY) GENETICS INST INC.

PI

XX WPI; 2001-483195/52.
XX N-PSDB; AAH76438.

XX Novel antibody-toxic group conjugate comprising an antibody that
PT recognizes a molecule expressed only on activated T cells, useful for
PT modulating immune response for treating autoimmune disorder, allergic
PT response -

XX Example 7; Page 84; 123pp; English.

XX The invention relates to an antibody-toxic group conjugate comprising
XX an antibody that specifically recognises a molecule expressed only on
XX activated T cells, and a toxic group. The T cell molecule is
XX preferably human cytotoxic T lymphocyte associated antigen 4 (CTLA4).
XX The antibody of the invention is a humanised anti-CTLA4 antibody
XX comprising a sequence of 128 or 142 amino acids fully defined in the
XX specification. The antibody-toxic group conjugate is useful for
XX modulating the immune response in a subject suffering from a disorder,
XX or condition such as autoimmune disorder, immune response to a graft,
XX allergic response or an immune response to a therapeutic protein.
XX The antibody is also useful for research purposes, e.g., in staining
XX and isolating CTLA4-bearing cells. The antibody is also useful for
XX T-cell typing, for isolating specific IL-2 receptor-bearing cells or
XX fragments of the receptor, for vaccine preparation, and for determining
XX the effectiveness of an agent to down-regulate CTLA4 activity. The
XX present sequence is the heavy chain variable region of mouse
XX antibody 26. It was used in the construction of the humanised anti-CTLA4
XX antibody of the invention.

XX Sequence 142 AA;

Query Match 89.5%; Score 664; DB 22; Length 142;
Best Local Similarity 88.0%; Pred. No. 5.1e-53;
Matches 125; Conservative 8; Mismatches 9; Indels 0; Gaps 0;

Qy 1 MAVLVFLCLVAFPPSCVLSQVQLQESGPGLVKPSQTLSTCTVSGFSLTSYGVYWRQPP 60
Db 1 MAVLVFLCLVAFPPSCVLSQVQLQESGPGLVKPSQTLSTCTVSGFSLTSYGVYWRQPP 60
Qy 61 GKLEWLGVIWAGGTTNYSALMSRLTISKDTSKNOVSLKLSVTAADTAVYVCARGPPH 120
Db 61 GKLEWLGVIWAGGTTNYSALMSRLTISKDTSKNOVSLKLSVTAADTAVYVCARGPPH 120
Qy 121 AMMKRGVAMYDYGQGLTVTVSS 142
Db 121 AMMKRGVAMYDYGQGLTVTVSS 142

RESULT 3
AAW30273
AAW30273 standard; Protein; 137 AA.

AC AAW30273;
XX 07-JUL-1998 (first entry)
XX Heavy chain of Hum4TS.22.
XX Hum4TS.22; antibody; platelet derived growth factor receptor; PDGF-R beta;
XX inhibition; intimal hyperplasia; vasculature; restenosis; angioplasty;
XX heavy chain.
XX Homo sapiens.
XX Key
XX Protein
XX Binding-site
XX Location/Qualifiers
XX 58..137
XX /note= "Mature Protein"
XX 49..54
XX /note= "Complementarity determining region 1"

FT Binding-site 68..84 /note= "Complementarity determining region 2"
 FT Binding-site 116..126 /note= "Complementarity determining region 3"
 FT Misc-difference 20 /note= "Optionally Asn at position 1 of mature protein"
 FT Misc-difference 49 /note= "Optionally Ser at position 30 of the mature protein"
 FT Misc-difference 56 /note= "Optionally Ser at position 37 of the mature protein"
 FT Misc-difference 66 /note= "Optionally Ile at position 48 of the mature protein"
 FT Misc-difference 86 /note= "Optionally Ile at position 67 of the mature protein"
 FT Misc-difference 92 /note= "Optionally Val at position 73 of the mature protein"
 FT Misc-difference 93 /note= "Optionally Leu, Ile, and Met at position 74 of the mature protein"
 FT Misc-difference 102 /note= "Optionally Ile at position 74 of the mature protein"
 PN WO9737029-A1.
 XX 09-OCT-1997.
 XX 19-MAR-1997; 97WO-US04198.
 XX 22-MAR-1996; 96US-0621751.
 XX (BOE) BOEHRINGER MANNHEIM GMBH.
 XX (PROT-) PROTEIN DESIGN LABS INC.
 XX Chang CN, Landolfi NF, Martin U;
 XX WPI: 1997-503114/46.
 XX N-PSDB; AAT90980.
 XX Antibodies to platelet derived growth factor beta receptor - inhibit PDGF BB-induced proliferation of cells expressing the receptor, used particularly for inhibiting intimal hyperplasia
 XX Claim 6; Fig 2C; 87pp; English.
 XX This is the amino acid sequence for the heavy chain of HuM4TS.22, a novel antibody which specifically binds to the platelet derived growth factor beta receptor (PDGF-R beta), but not within the fifth extracellular Ig-like domain, where the antibody inhibits PDGF BB-induced proliferation of a cell expressing the PDGF beta receptor. The antibody can be used in a method of inhibiting intimal hyperplasia in the vasculature of a mammal. The antibodies can be used for the treatment of disorders related to PDGF activity such as disorders involving proliferation of smooth muscle cells, and including restenosis following angioplasty.
 XX Sequence 137 AA;

Query Match 81.3%; Score 603.5; DB 18; Length 137;
 Best Local Similarity 83.1%; Pred. No. 1.5e-47;
 Matches 118; Conservative 5; Mismatches 14; Indels 5; Gaps 1;
 QY 1 MAVLVFLCLVAFPSCVLSQVQLQESGPGLVKPSQTLSTCTVSGFSLTSYGVYVWRQPP 60
 Db 1 mavlallclvtfscalsqvlqespgglvkpsqtlstctvsgfsltsygvynwrqpp 60

QY 61 GKLEWLGVWAGGTTNTNSALMSRLTISKDTSKNQVSLKSSVTAADTAVYVARGPPH 120
 Db 61 gkglewlgilwtgggtsynsalksrlltsktsknqgsklssvtaadavyyar---- 116
 QY 121 AMMRGYAMDYWGQGTTLTVSS 142
 Db 117 -tgtrgyffdywggtltvtvss 137
 RESULT 4
 AAW22538
 ID AAW22538 standard; Protein; 140 AA.
 XX AAW22538;
 AC AC
 DT 03-NOV-1997 (first entry)
 DE Murine anti-human class II monoclonal antibody 44H104 VH chain.
 DE Antibody; light chain; variable region; hybridoma cell line 44H104;
 KW immune response; enhance; stimulate; vaccine; immunodiagnosis;
 KW antigen delivery.
 XX OS Mus musculus.
 XX PN WO9640941-A1.
 XX PD 19-DEC-1996.
 XX PF 07-JUN-1996; 96WO-CA00400.
 XX PR 07-JUN-1995; 95US-0483576.
 XX PA (CONN-) CONNAUGHT LAB LTD.
 XX PI Anand NN, Barber BH, Caterini JE, Cates GC, Klein MH;
 XX DR WPI: 1997-077271/07.
 XX N-PSDB; AAT77852.
 XX Recombinant conjugate antibody mol., modified for delivering an antigen - elicits enhanced immune response without the use of adjuvant to generate antibodies which are useful in vaccines or immuno:diagnosis
 XX Example 1; Fig 1B; 64pp; English.
 XX Novel recombinant conjugate antibody molecules comprise a monoclonal antibody specific for a surface structure of antigen presenting cells (APC), genetically modified to contain at least one antigen exclusively at one or more preselected sites. The conjugate is capable of delivering the antigen to APC and eliciting an immune response to the antigen. The new conjugates are useful as vaccines and are able to elicit an enhanced immune response without the use of an adjuvant. In a specific example, a conjugate antibody constructed using the murine anti-human class II monoclonal antibody secreted by hybridoma 44H104. The peptide CLTB36 was chosen as antigen; it consists of a tandemly linked T and B cell epitope derived from HIV MN strain. The present sequence represents the heavy chain variable region from 44H104 which was used in the preparation of a conjugate with antigen CLTB36.
 XX Sequence 140 AA;

Query Match 73.5%; Score 545; DB 18; Length 140;
 Best Local Similarity 76.2%; Pred. No. 3.1e-42;
 Matches 109; Conservative 12; Mismatches 18; Indels 4; Gaps 2;
 QY 1 MAVLVFLCLVAFPSCVLSQVQLQESGPGLVKPSQTLSTCTVSGFSLTSYGVYVWRQPP 59
 Db 1 mallvflslaaafpcgvlsgvqlkespgglvapsqsltsictvsgfsltsygvhwvrqp 60

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QY 60 POKGLEWLVGWAGTTNNYNSALMSRLTISKDTSKNOVSLKSSVTAADTAVYYCARGPP 119
 Db 61 POKGLEWLVGWAGTTNNYNSALMSRLTISKDTSKNOVSLKSSVTAADTAVYYCARGPP 120
 QY 120 HAMKRGVAMDYWGOGTLVTSS 142
 Db 121 dyv---hyamdywgqgtsvtass 140

RESULT 5
 ID AAB81975
 XX AAB81975 standard; Protein; 137 AA.
 AC AAB81975;
 XX
 DT 03-JUL-2001 (first entry)
 XX
 DE Ganglioside GD2 specific antibody related protein #1.
 XX
 KW Ganglioside; GD2; complementation determining region; CDR; antibody;
 OS mouse; cancer.
 XX Mus musculus.
 PN WO200123573-A1.
 XX
 PD 05-APR-2001.
 XX
 PF 29-SEP-2000; 2000WO-JP06773.
 XX
 PR 30-SEP-1999; 99JP-0278290.
 XX
 PA (KYOW) KYOWA HAKKO KOGYO KK.
 XX
 PI Hanai N, Shitara K, Nakamura K, Niwa R;
 XX
 DR WPI: 2001-266163/27.
 DR N-PSDB; AAF86854.

XX Human type complementation-determining domain transplanted antibody and
 PT derivatives against ganglioside GD2, useful in diagnosis and therapy of
 PT e.g. tumours, has low antigenicity, little side effects but potent
 PT activity in cancer
 XX
 PS Example 2; Page 96-97; 123pp; Japanese.
 CC The present invention describes an antibody, which can react specifically
 CC with ganglioside GD2, and is transplanted with a human type
 CC complementation-determining domain (CDR), or its fragments. The antibody
 CC and its derivatives are useful in diagnosis and therapy of tumours,
 CC particularly cancer diagnosis. The present sequence is a protein
 CC used in the exemplification of the invention.

XX SQ Sequence 137 AA;
 Query Match 73.0%; Score 541.5; DB 22; Length 137;
 Best Local Similarity 74.1%; Pred. No. 6.3e-42;
 Matches 106; Conservative 15; Mismatches 15; Indels 7; Gaps 2;

QY 1 MAVLVFLCLVAPPCVLSQVQLQESGPGLVKPSQTLSTCTVSGFSLTSYGWVWRQPP 60
 Db 1 MAVLVFLCLVAPPCVLSQVQLQESGPGLVKPSQTLSTCTVSGFSLTSYGWVWRQPP 60
 QY 61 GKGLWLVGWAGTTNNYNSALMSRLTISKDTSKNOVSLKSSVTAADTAVYYCARGPP 120
 Db 61 GKGLWLVGWAGTTNNYNSALMSRLTISKDTSKNOVSLKSSVTAADTAVYYCARGPP 120
 QY 121 AMKRGYA-MDYWGQGLVTSS 142
 Db 117 --rsddyswfaywgqgltvtvsa 137

RESULT 6

AAR98941
 ID AAR98941 standard; Protein; 151 AA.
 XX
 AC AAR98941;
 XX
 DT 03-JAN-1997 (first entry)
 XX
 DE Humanised anti-CD38 monoclonal antibody variable heavy chain.

XX Monoclonal antibody; MAb; humanised; cancer; autoimmune disease;
 KW multiple myeloma; lymphoma; rheumatoid arthritis; CD38;
 KW complementary determining region; CDR; heavy chain; light chain.
 XX
 OS Mus musculus.
 OS Homo sapiens.

XX Key Location/Qualifiers
 XX Region 52..56
 FT /label= CDR 1.
 FT Region 71..86
 FT /label= CDR 2.
 FT Region 119..129
 FT /label= CDR 3.

XX WO9616990-A1.
 PN
 XX 06-JUN-1996.
 PD
 XX 28-NOV-1995; 95WO-GB02777.
 PF
 XX 02-DEC-1994; 94GB-0024449.
 PR
 XX (WELL) WELLCOME FOUND LTD.
 PA
 XX Ellis JH, Lewis AP;
 PI
 XX WPI: 1996-277724/28.
 DR N-PSDB; AAT34815.

XX Humanised monoclonal antibodies with donor framework residues 29 and
 PT 78 - esp. against CD38, useful for treating cancer and auto-immune
 PT diseases
 XX
 PS Disclosure; Figure 1; 92pp; English.

XX A monoclonal antibody (Mab) which has donor CDR's of foreign origin
 CC and a recipient framework of human or primate origin, where the
 CC original amino acid at position 29 or 78 of the heavy (H) chain of
 CC the framework is replaced by an amino acid the same as or similar to
 CC that in the corresponding position of the H chain of the Ab from
 CC which the CDR's are derived, can be used for the treatment of cancer,
 CC and autoimmune diseases, specifically multiple myeloma, lymphoma and
 CC rheumatoid arthritis. The Mab binds to CD38. Replacing framework
 CC residues 29 and 78 of the humanised Ab with the original donor
 CC residues restores the antigen binding activity of the antibodies.

XX SQ Sequence 151 AA;

Query Match 71.4%; Score 530; DB 17; Length 151;
 Best Local Similarity 69.7%; Pred. No. 7.8e-41;
 Matches 99; Conservative 19; Mismatches 20; Indels 4; Gaps 1;

QY 1 MAVLVFLCLVAPPCVLSQVQLQESGPGLVKPSQTLSTCTVSGFSLTSYGWVWRQPP 60
 Db 3 MAVLVFLCLVAPPCVLSQVQLQESGPGLVKPSQTLSTCTVSGFSLTSYGWVWRQPP 62
 QY 61 GKGLWLVGWAGTTNNYNSALMSRLTISKDTSKNOVSLKSSVTAADTAVYYCARGPP 120
 Db 63 GKGLWLVGWAGTTNNYNSALMSRLTISKDTSKNOVSLKSSVTAADTAVYYCARGPP 118
 QY 121 AMKRGYAMDYWGQGLVTSS 142

Query Match	71.18;	Score 527.5;	DB 18;	Length 137;
Best Local Similarity	71.18;	Pred. No. 1.2e-40;		

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Matches 101; Conservative 14; Mismatches 22; Indels 5; Gaps 1;

QY 1 MAVLVFLCLVAFPPSCVLQVQLOESGPGVLVVKPSQTLSTCTVSGFSLTSYGVYVWRQPP 60
 DB 1 MAVLALLCLVTFSCALSGVLKESGPGVLVAPSGSLTSITCTVSGFSLTSYGVYVWRQPP 60

QY 61 GKGLWLVGVIWAGGTTNYSALMSRLTISKDTSKNOVSLKSSVTAADTAVYYCARGPPH 120
 DB 61 GGLWLVGVIWAGGTTNYSALMSRLTISKDTSKNOVSLKSSVTAADTAVYYCARGPPH 120

QY 121 AMMKRGYAMDYWGQGLTVTVSS 142
 DB 117 -tgtrgyfddywgqgttlvtss 137

RESULT 9
 ID AAW01146 standard; Protein; 138 AA.
 XX AAW01146;

10-FEB-1997 (first entry)
 MAB 10.1 heavy chain, directed against type II phospholipase A2.

XX Monoclonal antibody; phospholipase; myocardial infarction;
 KW pancreatitis; cerebral infarction; acute kidney failure; colitis;
 KW chronic rheumatism; adult respiratory distress syndrome;
 KW cardiac shock; treatment; preclinical testing; disease; hybridoma.

XX Mus musculus.

XX Key Location/Qualifiers
 FH Binding-site 50..54 /label= CDR 1
 FT Binding-site 69..84 /label= CDR 2
 FT Binding-site 117..127 /label= CDR 3

XX WO9620959-A1.
 XX 11-JUL-1996.
 XX 27-DEC-1995; 95WO-JP02714.
 XX 29-DEC-1994; 94JP-0340006.

XX (YAMA) YAMANOUCHI PHARM CO LTD.
 PI Kawauchi Y, Masuho Y, Takasaki J, Yasunaga T;
 DR WPI; 1996-333946/33.
 DR N-PSDB; AAT40806.

XX Monoclonal antibody inhibiting type II phospholipase A2 activity
 PT for treatment of myocardial and cerebral infarction

XX Claim 6; Figure 14; 69pp; Japanese.

XX Monoclonal antibodies which inhibit type II phospholipase A2 are
 CC useful in the treatment of myocardial infarction, cerebral
 CC infarction, acute kidney failure, chronic rheumatism, cardiac shock,
 CC pancreatitis, adult respiratory distress syndrome and colitis. The
 CC antibodies were generated by immunising Balb/C mice with recombinant
 CC human type II phospholipase A2. Spleen cells from the mice were
 CC fused with mouse myeloma p3U1 (P3x63Ag8.01) and the hybridomas
 CC obtained were screened for phospholipase A2 inhibitory activity.
 CC Active clones were isolated including 12H5, 1-4 and 10.1. These
 CC were cultured and the antibody isolated from the culture
 CC supernatant by precipitation with ammonium sulphate and purification
 CC on a column of protein A-Sepharose CL4B. Because the antibody acts
 CC on the primate and mouse forms of enzyme as well as human it is

CC particularly suitable for preclinical testing.

XX SQ Sequence 138 AA;

Query Match 71.0%; Score 527; DB 17; Length 138;
 Best Local Similarity 71.1%; Pred. No. 1.3e-40;
 Matches 101; Conservative 14; Mismatches 23; Indels 4; Gaps 1;

QY 1 MAVLVFLCLVAFPPSCVLQVQLOESGPGVLVVKPSQTLSTCTVSGFSLTSYGVYVWRQPP 60
 DB 1 MAVLALLCLVTFSCALSGVLKESGPGVLVAPSGSLTSITCTVSGFSLTSYGVYVWRQPP 60

QY 61 GKGLWLVGVIWAGGTTNYSALMSRLTISKDTSKNOVSLKSSVTAADTAVYYCARGPPH 120
 DB 61 GGLWLVGVIWAGGTTNYSALMSRLTISKDTSKNOVSLKSSVTAADTAVYYCARGPPH 120

QY 121 AMMKRGYAMDYWGQGLTVTVSS 142
 DB 121 gf---yamdywgqgtstvtss 138

RESULT 10
 ID AAR98492 standard; Protein; 119 AA.
 XX AAR98492;

XX 12-OCT-1996 (first entry)
 DE NEWM humanised 2B6 antibody heavy chain variable region.

XX Antibody engineering; humanised antibody; chimeric antibody; Fab;
 KW interleukin-5; IL-5; eosinophil; asthma; allergic rhinitis;
 KW atopic dermatitis; therapy; diagnosis; heavy chain; VH;
 KW monoclonal antibody; Mab.

XX Synthetic.

XX Key Location/Qualifiers
 FH Region 1..30 /note= "human NEWM framework region"
 FT Region 31..35 /label= CDR1
 FT /note= "mouse Mab 2B6 VH CDR1"
 FT Region 36..49 /note= "human NEWM framework region"
 FT /note= "mouse Mab 2B6 VH CDR2"
 FT /note= "mouse Mab 2B6 VH CDR3"
 FT Region 98..108 /note= "human NEWM framework region"
 FT /note= "mouse Mab 2B6 VH CDR3"
 FT Region 109..119 /note= "human NEWM framework region"

XX WO9621000-A2.
 XX 11-JUL-1996.
 XX 22-DEC-1995; 95WO-US17082.
 XX 06-JUN-1995; 95US-0470110.
 XX 23-DEC-1994; 94US-0363131.
 XX 06-JUN-1995; 95US-0467420.
 XX (SMIK) SMITHKLINE BEECHAM CORP.
 XX (SMIK) SMITHKLINE BEECHAM PLC.
 XX Ames RS, Appelbaum ER, Chaiken IM, Cook RM, Gross MS;
 PI Holmes SD, McMillan LJ, Theisen TW;

XX WPI; 1996-333976/33.
 DR N-PSDB; AAT34095.
 XX
 PT New monoclonal antibody to human interleukin-5 - used to produce
 PT products for the treatment and diagnosis of conditions associated
 PT with excess eosinophil prodrn., e.g. asthma etc.
 XX
 PS Claim 28; Page 87-88; 120pp; English.
 XX
 CC The heavy chain variable region (AAR98492) of NEWM humanised antibody
 CC 2B6 comprises complementarity determining regions (see also AAR98480-82)
 CC derived from murine monoclonal antibody 2B6 VH (see also AAR98478) and
 CC framework regions from human immunoglobulin NEW, but with amino acid
 CC substitutions made at framework residues that might influence CDR
 CC presentation. A synthetic variable light chain sequence (AAR98493)
 CC was also constructed. Humanised 2B6 (see also AAR98488-89) is
 CC specific for human interleukin-5 (IL-5) and can be used for the
 CC diagnosis and treatment of IL-5-mediated conditions, e.g. asthma,
 CC allergic rhinitis and atopic dermatitis.
 SQ Sequence 119 AA;

Query Match 70.8%; Score 525; DB 17; Length 119;
 Best Local Similarity 81.3%; Pred. No. 1.7e-40;
 Matches 100; Conservative 11; Mismatches 8; Indels 4; Gaps 1;
 QY 20 QVQLQESGPGLVKPSQTLSTCTVSGFSLTSYGYYVVRQPPGKLEWLGVIWAGGTTN 79
 Db 1 qvqlqesgpglvkpsqtlstctvsgfsltsygvhvrqppgklegvhwagggtdyn 60
 QY 80 SALMSRLTISKDTSKNQVSLKSSVTAADTAVYYCARGPPHAMMKRGYAMDYGQGLT 139
 Db 61 salmsrlslkdnksqgvsrlssvtaadtavyyccardppssllr----ldywgqgttvt 116
 QY 140 VSS 142
 Db 117 vss 119

RESULT 11
 AAB69656
 ID AAB69656 standard; Protein; 138 AA.
 AC AAB69656;
 XX

30-APR-2001 (first entry)

Murine mik-beta1 antibody heavy chain SEQ ID NO: 33.

XX Humanised immunoglobulin; mouse; human; antibody; heavy chain; diabetes;
 KW light chain; graft versus host disease; transplant; autoimmune disease;
 KW multiple sclerosis; rheumatoid arthritis; systemic lupus erythematosus;
 KW myasthenia gravis; herpes infection; myeloid leukaemia; CMV infection.
 XX

OS Mus sp.

XX US6180370-B1.

PN 30-JAN-2001.

XX 07-JUN-1995; 95US-0484537.

XX 28-DEC-1988; 88US-0290975.

PR 13-FEB-1989; 89US-0310252.

PR 28-SEP-1990; 90US-0590274.

PR 19-DEC-1990; 90US-0634278.

XX (PROT-) PROTEIN DESIGN LABS INC.

XX Queen CL, Selick HE;

XX

DR WPI; 2001-190856/19.
 DR N-PSDB; AAF58728.
 XX

PT Producing humanized immunoglobulin, involves producing a cell
 PT containing DNA segments encoding humanized heavy and light chain
 PT variable regions, and expressing the DNA segments in the cell -
 XX

PS Example 5; Fig 23; 145pp; English.

XX The present invention describes a method of producing humanised
 CC immunoglobulins involving expressing in a cell a nucleic acid encoding a
 CC humanised version of an immunoglobulin. This is obtained by comparing a
 CC donor and human immunoglobulin and producing a combined antibody which
 CC contains part of each. These are useful in the treatment of
 CC graft-versus-host disease, transplant rejection, autoimmune diseases such
 CC as diabetes, rheumatoid arthritis, myasthenia gravis, multiple sclerosis
 CC and systemic lupus erythematosus, herpes infections, CMV virus infections
 CC and myeloid leukaemia. The present sequence is an antibody used to
 CC demonstrate the method of the invention.

SQ Sequence 138 AA;

Query Match 70.8%; Score 525; DB 22; Length 138;
 Best Local Similarity 70.4%; Pred. No. 2e-40;
 Matches 100; Conservative 21; Mismatches 17; Indels 4; Gaps 2;

QY 1 MAVLVLECLVAFPCVLSQVQLQESGPGLVKPSQTLSTCTVSGFSLTSYGYYVVRQPP 60
 Db 1 mavlvlleclvafpcvlsqvlkpsqtlstctvsgfsltsygyvvrqpp 60

QY 61 GKLEWLGVIWAGGTTNYSALMSRLTISKDTSKNQVSLKSSVTAADTAVYYCARGPPH 120
 Db 61 gklegwlgvhwaggttnysalmsrltiskdtsknqvslkssvtaadtavyycargpph 120

QY 121 AMMKRGYAMDYGQGLTAVTSS 142
 Db 121 ny--dgfa--ywggtltvtvsa 138

XX

XX AAW42471 standard; Protein; 119 AA.

XX AAW42471;

XX 22-JUN-1998 (first entry)

XX NEWM humanised heavy chain variable region.

XX Neutralising antibody; monoclonal antibody; MAB; 2B6; NEW; mouse;
 KW interleukin-5; IL-5; human; eosinophil; asthma; allergic rhinitis;
 KW atopic dermatitis; therapy; diagnosis; humanised antibody.

XX Chimeric - Mus musculus.

OS Chimeric - Homo sapiens.

XX Key Location/Qualifiers

XX Region 1..30

XX /label= FR1

XX /note= "NEW framework region 1"

XX Region 31..35

XX /label= CDR1

XX /note= "2B6 complementarity determining region 1"

XX Region 36..49

XX /label= FR2

XX /note= "NEW framework region 2"

XX Region 50..65

XX /label= CDR2

XX /note= "2B6 complementarity determining region 2"

XX Region 66..97

XX /label= FR3

XX /note= "NEW framework region 3"

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XX The humanised ID10 antibody heavy chain (AAW05827) includes a
CC variable region (see also AAW05823) consisting of human R3.5HG heavy
CC chain variable region framework and complementarity determining
CC regions from the murine ID10 antibody specific for a 28/32 kDa
CC antigen found on the surface of malignant B-cells. It can be
CC coexpressed with humanised ID10 light chain (see also AAW05828) in
CC mammalian host cells. Bispecific antibodies can be constructed that
CC include a first binding fragment comprising humanised M291 heavy and
CC light chain variable regions (see also AAW05826, AAW05830), and a second
CC binding fragment comprising humanised ID10 heavy and light chain
CC variable regions. Such antibodies are reactive with both T or NK
CC cells and malignant B cells, and have therapeutic and diagnostic
CC applns.
XX
SQ Sequence 273 AA;

Query Match 69.5%; Score 515.5; DB 17; Length 273;
Best Local Similarity 80.5%; Pred. No. 3.1e-39;
Matches 99; Conservative 10; Mismatches 7; Indels 7; Gaps 1;
QY 20 QVQLQESGPGLVKPSQTLSTCTVSGFSLTSYGVYVWRQPPGKGLWLVWAGGTTNYN 79
Db 1 qvqlqesgpglvkpsqtlstctvsgfsltnygvhwvrgspgkglewigkwsggsteyn 60
QY 80 SALMSRLTISKDTSKNQVSLKLSVTAADTAVYYCARGPPHAMMKRGYAMDYWGOGTLVT 139
Db 61 aafisrltitiskdtsknqvalkslnltaadtavyycaard-----ryamdywgggclvt 113
QY 140 VSS 142
Db 114 VSS 116

Search completed: May 7, 2002, 12:00:49
Job time: 127 sec